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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,037	01/25/2002	Esa Supponen	1497-110	8963

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EXAMINER

WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,037

Applicant(s)

SUPPONEN, ESA

Examiner

Alexis Wachtel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1-25-02.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Detailed Action

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6,8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,681,535 to Clampitt.

With respect to claim 1, Clampitt teaches a cracker apparatus, comprising

a) a container (1) for providing at least one gaseous crackable source material, which source material container is formed as a mainly cylindrical vessel having a closed first end part (Fig.1, right end of item 1) and at least substantially open second end part (Fig.1, left end of item 1) and a mainly cylindrical mantle (Fig.1, item 1) part between said end parts, said open second end part forming an outlet opening through which said gaseous crackable source material is arranged to flow out from said container,

b) dispenser means for receiving said gaseous crackable source material from said container, said dispenser means comprising dispenser valve means (Col 2, lines 32-37) for controlling the flow of said gaseous crackable source material through said dispenser means;

c) cracker means (30) for receiving said at least one gaseous crackable source material from said dispenser means; whereby said second end part of the source material container is arranged to be detachably coupled to said dispenser means (Col 2,

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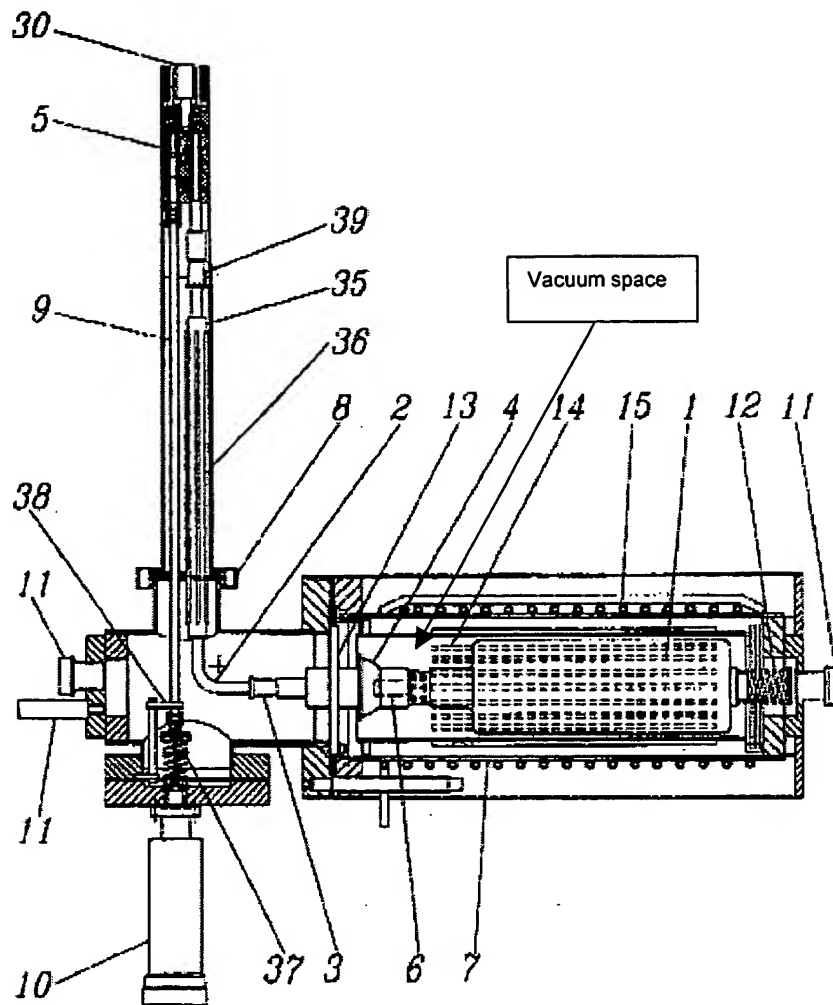
lines 14-19), and the supply of new source material into the source material container is arranged through said outlet opening when said container is detached from the dispenser means. Examiner notes that new source material is capable of being supplied into said outlet opening when said container is detached from the dispenser means.

With respect to claim 2, while Clampitt does not explicitly teach that the interior of the source material container is reachable only through said outlet opening, Clampitt implies that this is the case since Clampitt does not teach that the source material container is openable from a first end.

With respect to claim 3, Clampitt teaches that the area of said outlet opening covers substantially the whole cross-sectional area of said second end part. Examiner notes that the second end (Fig.1, left end of item 1) is considered to be generally in the area of the outlet.

With respect to claim 4, Clampitt teaches that an electrical heating means (14) is arranged around at least a substantial part of the source material container.

With respect to claim 5, Clampitt teaches that a vacuum vessel means is arranged detachably around the source material container and around the electrical heating means whereby a vacuum zone is formed around at least a substantial part of the source material container (See Fig. in Office Action).



With respect to claim 6, Clampitt teaches that the electrical heating means (14) is arranged detachably around at least a substantial part of the source material container.

With respect to claim 8, the apparatus disclosed by Clampitt is capable of using arsenic as a crackable source material.

With respect to claim 9, Clampitt teaches a cracker source material container (1) for providing at least one gaseous crackable source material for cracker means, which source material is formed as a mainly cylindrical vessel having a closed first end part

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(Fig.1, right end of item 1) and at least substantially open second end part (Fig.1, left end of item 1) and a mainly cylindrical mantle part between said end parts, said open second end part forming an outlet opening through which said gaseous crackable source material is arranged to flow out from said container into said cracker means, which said second end part of the source material container is arranged through said outlet opening when said container is detached from said cracker means.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,681,535 to Champitt in view of US 5156815 to Streetman et al.

With respect to claim 7, Champitt teaches that airtight connector (11) provide power for the heating elements and also temperature measuring thermocouples, wherein said airtight connector is situated on outside of the first end part of the source material container. Champitt does not teach at least two substantially concentric metal circles arranged on the outside of the first end part of the source material container, the metal circles arranged in galvanic contact with the electrical heating means, and at least two metal rods arranged on the inside of the vacuum vessel means, said metal rods being arranged on the inside of the vacuum vessel means, said metal rods being arranged into galvanic contact with said metal circles when the vacuum vessel means

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is attached hermetically around the source material container, whereby electrical power for the electrical heating means is arranged from the outside of the vacuum vessel means via said metal rods and said metal circles. Streetman et al is directed to a cracking apparatus that includes electrical supply conduits (40,42) attached to electrical connection leads (44,46). Buses (32) direct electrical energy into ribbon (30) located inside vacuum vessel which functions. Since Streetman et al establishes the conventionality of providing electricity to a vacuum vessel, it would have been an obvious matter of design choice to have configured the airtight connector as disclosed by Clampitt such that the resultant apparatus has two substantially concentric metal circles arranged on the outside of the first end part of the source material container, the metal circles arranged in galvanic contact with the electrical heating means, and at least two metal rods arranged on the inside of the vacuum vessel means, said metal rods being arranged on the inside of the vacuum vessel means, said metal rods being arranged into galvanic contact with said metal circles when the vacuum vessel means is attached hermetically around the source material container, whereby electrical power for the electrical heating means is arranged from the outside of the vacuum vessel means via said metal rods and said metal circles since such a reconfiguration is a mere conceptual variation of the electrical delivery system disclosed by Streetman et al.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Wachtel whose telephone number is 571-272-1455. The examiner can normally be reached on 10:30am to 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Glenn Caldarola, can be reached at (571)-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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